

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of listing of claims, and listing of claims in the application.

1- 31 (Cancelled)

- 32. (New) A monomeric single-chain Fv (scFv) antibody fragment comprising an amino acid sequence as set forth in SEQ ID NO: 16, wherein the monomeric scFv antibody fragment is specific for human carcinoembryonic antigen.
- 33. (New) An antibody fragment according to claim 32, further comprising a detectable agent.
- 34. (New) An antibody fragment according to claim 33, wherein the detectable agent is a radioactive label.
- 35. (New) An antibody fragment according to claim 33, wherein the detectable agent is a reporter molecule.
- 36. (New) A pharmaceutical composition comprising an amino acid sequence as set forth in SEQ ID NO: 16 and a pharmaceutically-acceptable carrier.
- 37. (New) A method for identifying tumor cells that express human carcinoembryonic antigen, comprising contacting a cell sample with an effective amount of an antibody fragment comprising an amino acid sequence as set forth in SEQ ID NO: 16.
- 38. (New) A method for treating tumors that express human carcinoembryonic antigen, comprising administering an effective amount of an antibody fragment comprising an amino acid sequence as set forth in SEQ ID NO: 16.
- 39. (New) A divalent single-chain Fv (scFv) antibody fragment comprising an amino acid sequence as set forth in SEQ ID NO: 17, wherein the divalent scFv antibody fragment is specific for human carcinoembryonic antigen.

40. (New) An antibody fragment according to claim 38, further comprising a detectable agent.
41. (New) An antibody fragment according to claim 39, wherein the detectable agent is a radioactive label.
42. (New) An antibody fragment according to claim 39, wherein the detectable agent is a reporter molecule.
43. (New) A pharmaceutical composition comprising an amino acid sequence as set forth in SEQ ID NO: 17 and a pharmaceutically-acceptable carrier.
44. (New) A method for identifying tumor cells that express human carcinoembryonic antigen, comprising contacting a cell sample with an effective amount of an antibody fragment comprising an amino acid sequence as set forth in SEQ ID NO: 17.
45. (New) A method for treating tumors that express human carcinoembryonic antigen, comprising administering an effective amount of an antibody fragment comprising an amino acid sequence as set forth in SEQ ID NO: 17.
46. (New) A recombinant antibody comprising an amino acid sequence as set forth in SEQ ID NO: 16 and SEQ ID NO: 17, wherein the antibody is specific for human carcinoembryonic antigen.